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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/518,933	07/26/2005	Masaru Kagawa	Q85336	6185
23373 7590 04/04/2007 SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			EXAMINER NGUYEN, CAM N	
			ART UNIT	PAPER NUMBER
			1754	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		04/04/2007	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

# Office Action Summary

Application No.

10/518,933

Applicant(s)

KAGAWA, MASARU

Examiner

Cam N. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 01/11/07 (an amendment/response).
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on originally filed is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>01/11/07</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### Response to Amendment

1. Applicants' amendment and remarks, filed January 11, 2007, has been made of record and entered. Claim 1 has been amended.

Claims 1-2 are currently pending.

### Claim Rejections - 35 USC § 102(b)/103

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Noguchi et al., "hereinafter referred to as Noguchi", (US Pat. 4,237,030).

Noguchi discloses a catalyst for purifying exhaust gas from an internal combustion engine comprising: a catalyst carrier consisting mainly of over 80% by weight of  $\alpha$ -alumina and

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less than 20% by weight of sintering promoter; and a catalyst consisting essentially of platinum catalyst material (see col. 8- col. 9, claim 1).

With respect to the claimed limitation on “purity of said alumina is 99.95% or above”, while Noguchi is silent with respect to the purity of the  $\alpha$ -alumina, it is inherent and expected that the same “ $\alpha$ -alumina” support material would possess the same purity.

If in fact the “ $\alpha$ -alumina” support material disclosed by Noguchi does not possess the claimed % purity, then the following applies.

It would have been *prima facie obvious* to one of ordinary skill in the art at the time the invention was made to have controlled the process conditions during the process of making such “ $\alpha$ -alumina” support material in order to result in a high purity, such as the claimed % purity, in view of *In re Boesch*.

**Claim Rejections - 35 USC § 102(b)**

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Bartsch (US Pat. 4,119,567).

Bartsch discloses a supported catalyst composition containing an amount of palladium supported on an alumina support having a crystalline alpha-alumina content of greater than about 96%, a theta-alumina content of less than about 3%, etc. (see col. 8, claim 1). Bartsch

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further discloses that other Group VIII metals, such as platinum, rhodium, ruthenium, iridium, or salts thereof may be employed by themselves or in combination with the palladium metal (see col. 5, ln 24-31).

There is no patentable distinction seen between the claimed catalyst and that disclosed by the reference. Thus, the claim is anticipated by the teaching of Bartsch.

**Claim Rejections - 35 USC § 103**

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Noguchi et al., "hereinafter referred to as Noguchi", (US Pat. 4,237,030) or Bartsch (US Pat. 4,119,567) in view of Itoh et al., "hereinafter referred to as Itoh", (US Pat. 5,997,830).

Noguchi and Bartsch disclose supported catalyst compositions as described above, but silent with respect to the platinum particle diameter.

However, it would have been *prima facie obvious* to one of ordinary skill in the art at the time the invention was made to have utilized such known platinum metal in Noguchi and Barstch to make their catalysts because "platinum" having an average particle diameter of 2 to 300 nm (or 20-3000 Å) is known and has been used as a catalytically active metal to make catalysts, as evidenced by Itoh (see Itoh at col. 20, claim 13). Note that the claimed particle diameter is met because it falls within the disclosed range.

**Response to Applicants' Arguments**

8. Applicants' amendment and response filed on January 11, 2007 has been fully considered, but not deemed persuasive for the following reasons.

First, applicants appear to be urging on the intended use of the claimed catalyst. The limitation on "for selectively oxidizing carbon monoxide in reformed gas with oxygen gas" in the instant claim 1 has been noted. However, this limitation is regarded as intended use limitation, which has no bearing on the patentability of the claimed catalyst. Since the instant claims are called for "a catalyst", only the catalyst limitations that determined the patentability of the claimed catalyst. Even though the catalysts disclosed in the prior art are used for treating exhaust gases or for another catalytic process as applicants argued, the catalyst compositions are the same since they contain the same metal component, Pt, and alumina support material as required in the instant claims. It is considered the new use or different use of the catalyst does not change the characteristic of the catalyst composition or the claimed composition depends on the intended use for completeness.

Second, applicants urged, that "the present invention does not ordinary contain  $\theta$ -alumina, as noted at page 5, line 35 to page 6, line 11 of the specification". This is not found persuasive because while this is disclosed in the specification, but it is not being claimed. The instant claim 1 does not exclude  $\theta$ -alumina or being limited to what being claimed.

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

#### **Conclusion**

10. Claims 1-2 are pending. Claims 1-2 are rejected. No claims are allowed.

#### **Contacts**

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Primary Examiner Cam N Nguyen, whose telephone number is 571-272-1357. The examiner can normally be reached on M-F, 9:00 AM - 6:30 PM, at alternative work site.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman, can be reached on 571-272-1358. The fax phone number for the organization where this application or proceeding is assigned is 571-272-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Cam N. Nguyen/

Nguyen/cnn

Primary Examiner

March 30, 2007

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